GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

October 20, 2015

Director Kathleen Clarke
Utah's Public Lands Policy Coordinating Office
5110 State Office Building
P.O. Box 141107
Salt Lake City, Utah 84114-1107

Subject: Comments Regarding the U.S. Department of the Interior, Office of Surface Mining Reclamation and Environment Draft Stream Protection Rule and Environmental Impact Statement

Dear Director Clarke,

The Division of Oil, Gas and Mining (DOGM) regulates and ensures industry compliance and site restoration while facilitating oil, gas and mining activities. The Coal Program within DOGM regulates coal mining and is directed in UCA 40-10 to support the existence of a viable coal mining industry, safeguard the environment, protect public health and safety, and achieve the successful reclamation of land affected by coal mining activities.

The proposed Stream Protection Rule by the Office of Surface Mining Reclamation and Enforcement (OSM) expands regulations in an attempt to better protect streams and associated environmental values. DOGM has numerous concerns with the proposed rule and preferred Alternative 8 of the Environmental Impact Statement (EIS).

DOGM's concerns relate to clarification of definitions, unrealistic requirements, hindering professional determinations, and overstepping regulatory authority. An overview of DOGM's comments is described in this letter; however, a technical review of the proposed rule by the Coal Program staff is attached for detailed information. First, DOGM supports the need to provide clear definitions to ensure environment protection. However, "material damage to the hydrologic balance" is too broadly defined to clearly identify sites with actual potential to cause adverse impacts. Additionally, the Coal Program has identified eleven phrases within the proposed rule which need further clarification of definitions or requirements to ensure proper preapproval and mine life regulation.

1594 West North Temple, Suite 1210, Salt Lake City, UT 84116
PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING

Second, several proposed regulations are unrealistic for coal mining within the State of Utah. The proposed rule represents a one-size-fits-all attempt to regulate coal mining nationwide. Due to Utah's unique climate and terrain, the requirements within the rule and Alternative 8 would eradicate coal mining within Utah. Specifically, the 100' stream rule and the baseline data collection of 12 consecutive months of monitoring are either impossible or life threatening requirements. Utah's snowfall makes any attempt to monitor during winter months impossible and the snow melt creates temporary streams which disappear during late spring. Furthermore, the proposed rule and Alternative 8 require data to be collected during a normal precipitation year. Again, due to the unique climate in Utah, this is another requirement which threatens Utah coal mining as a normal precipitation year can take several years, if not decades, to occur. DOGM recommends an either/or approach to the wording within the rule to account for the vast climates representing the United States.

Third, requirements of the proposed rule fail to allow the professional expertise of Utah's regulatory agency staff to protect the environment of our State. The proposed rule and Alternative 8 require specific biological conditions and increased participation of other regulatory agencies. The rule requires the input of other wildlife and biologic agencies to participate in every proposed plan. This overrides the specialized technical skills of DOGM staff to adequately require proper mine life and post mine protections. DOGM recommends the rule be revised to allow regulatory staff to seek out additional input as needed. This will prevent the approval process from being slowed down through cumbersome requirements.

Fourth, DOGM is concerned that OSM is overstepping its regulatory authority. DOGM is in agreement with the member states of the Interstate Mining Compact Commission (IMCC) that the Clean Water Act has established regulations and regulatory agencies to address the concerns in the proposed rule change. DOGM is concerned that the proposed rule has the potential to over-regulate water concerns nationwide and potentially overburden coal operators with regulatory requirements resulting in an economic and energy supply impact to the United States and the State of Utah. DOGM recommends OSM review the proposed rule with water protection agencies to ensure the Clean Water Act is adequately addressed without OSM overstepping its authority.

Additionally, DOGM would like to express its concern with the timing and process of this rules development and regulatory agency participation. Coal mining is critical to the United States economy and energy development. Section 3.1 of the EIS reports that 2012 coal production had decreased by 7.2 percent. As of October 3, 2015, the Energy Information Administration reports coal production has again decreased by 4.3 percent from the comparable week in 2014. DOGM believes the impact of the proposed rule as written will result in continued declining coal production thereby threatening vast aspects of the nation's economy.

Moreover, DOGM entered into a memorandum of understanding (MOU) in 2010 with OSM as a cooperating agency. However, DOGM became frustrated with OSM's consistent failure to abide by its obligations under the MOU and lack of open communication. As a result, DOGM terminated its agreement to the MOU on March 25, 2015. DOGM's disappointment with OSM has again been raised due to the lack of adequate time to review the proposed rule, EIS and Regulatory Impact Analysis. OSM has allowed only 90 days to review over 3,000 pages. As DOGM's primary responsibility is to provide technical review of proposed activities within the State of Utah, 90 days did not provide adequate time to thoroughly review the proposed rule for adequacy in addressing the seven areas of regulatory improvement within Utah.

Furthermore, as a participating member of IMCC, DOGM's Associate Director of Mining, Dana Dean, attended a meeting in August 2015 regarding the proposed Stream Protection Rule, the EIS and the Regulatory Impact Analysis. DOGM supports the comments submitted by IMCC. Likewise, DOGM is in receipt of IMCC's October 6, 2015 letter to Assistant Secretary Schneider of the Department of the Interior requesting an additional 30 days to prepare its comments. DOGM encourages the approval of IMCC's request as Associate Director Dean will be attending the IMCC Mid-Year meeting beginning October 26 for further collaboration on these documents.

In conclusion, DOGM recognizes the need to and supports efforts to protect the safety of water sources and other environment concerns. However, the proposed rule and preferred Alternative 8 places a one-size-fits-all regulation on a nation with varying climate conditions and terrain. The proposed regulations address concerns regarding eastern states with high levels of precipitation, but in doing so will eradicate the prosperity of coal mining in Utah. DOGM recommends OSM reevaluate the suggested requirements to include all climates within the nation. Additionally, DOGM recommends OSM revise the requirements to allow the professional skills of regulatory agency staff to protect the environment and streams within their authority. Finally, DOGM recommends OSM reevaluate the proposed rule with Clean Water Act agencies to ensure it is not over stepping its authority therefore creating over-regulation.

DOGM appreciates the opportunity to comment on the proposed rule and EIS which will have an effect on our regulation of coal mines within Utah.

Sincerely,

John R. Baza
Director

JRB: DD: SS: eb
Attachment: DOGM Stream Protection Rule Technical Comment Form

Utah Division of Oil, Gas and Mining
Stream Protection Rule Technical Comment Form
October 20, 2015

Section	Page #	Comment
		BIOLOGY (WILDLIFE & VEGETATION)
779.20(d) (plants) **780.16 (e) (animals)** **783.20 (d)** **784.16 (1)(i)**	**44593**	Fish and Wildlife Resources: The proposed changes will increase the workload for State and Federal Agencies as it *requires* the State to submit the wildlife resources plan to the Fish and Wildlife Service whenever the resource information includes species listed as threatened or endangered. R645-301-322.300 currently states, "*Upon request*, the Division will provide the resource information and enhancement plan...". The State will incur additional time and expense to provide every plan to the Service. The Service will incur additional time and expense during its review and response." The process will likely extend every review by an additional 30 days. It should be noted that most plans will include species listed under the ESA within the permit area because it is dictated by County and not necessarily project areas. The adoption of the rule will require the State to expend valuable resources to modify R645-301-322.300 and all other rule changes to account for the proposed modifications. The rule does not provide a timeframe for response from the F&WS or take into consideration that time for additional review may extend all current timelines and will impact other rules with timelines. The Utah Division of Oil, Gas and Mining (DOGM) strongly recommends the rule be revised to state, "*Upon request*, the Division will provide the resource information obtained under paragraph (c) of this section to the applicable regional or field office of the U.S. Fish and Wildlife Service".
780.12 (6) Revegetation **784.12 (6)**	**44597**	Requires a professional forester or ecologist to develop and certify all revegetation plans that include the establishment of trees and shrubs. Shrubs are a significant component in seed mixes in the west (sagebrush, saltbush, shadscale) and live planting arrangements are unrealistic. A well thought-out seedmix can be created by other local specialists that are not "professional foresters or ecologists". This requirement is burdensome and unreasonable on the operator. The Utah Division of Oil, Gas and Mining strongly recommends the rule be revised to state, "A qualified person must develop and certify all revegetation plans that include the establishment of native plant communities. Where appropriate, these plans must include site-specific planting prescriptions for canopy trees, understory trees and shrubs, and herbaceous ground cover compatible with establishment of those trees and shrubs. Each plan must use native species exclusively unless those species are inconsistent with the approved postmining land use and that land use is implemented before the entire bond amount for the area has been fully released under 800.42(d) of this chapter.
780.16(c)(3) **780.16(c)(4), (5) and (8)**	**44599** **44599**	The proposed rule states, "To the extent possible, maintain an intact forested buffer at least 100' wide between surface disturbances and perennial and intermittent streams that are located in forested areas. The buffer width must be measured horizontally on a line perpendicular to the stream beginning at the bankfull elevation or, if there are no discernible banks, the centerline of the active channel." Additional information as to the percent cover that would constitute a "forested area" would be helpful. Clarify if this is based on the vegetation reference area. Additionally, paragraph (c)(5) requires, "Periodically evaluate the impacts of the operation on fish, wildlife and related environmental values in the permit and adjacent areas and use that information to modify operations or take other action to avoid or minimize adverse impacts on those values." Additional information as to what frequency "periodically" means is necessary (i.e. once a year, twice a year). The term "environmental values" does not appear to be a defined term with the proposed rule revision and the current 30 CFR's. Clarify what "environmental values" means.

		ENGINEERING
701.5	**44586**	'Adjacent area' definition: The definition states, "the adjacent area includes, at a minimum, the area overlying the underground workings plus the area within a reasonable angle of draw from the perimeter of the underground workings". The definition should provide clarification as to what the "perimeter of the underground workings area" is (i.e. the edge of the extent of subsidence or the edge of the bleeders/entries etc.). Instances have arisen where cultural, biological resources etc. have been located in close proximity to the surface extent of the angle of draw; however, depending on where the angle of draw is derived from (i.e. the edge of subsidence or the edge of the entries/bleeder sections), a natural resource may or may not need to be monitored/mitigated by rule.
701.5	**44587**	The Federal Register publication invited comments as to whether the definition in the final rule for intermittent stream should include language specifying that the Corps of Engineers has the ultimate authority to determine the point at which an ephemeral stream becomes an intermittent stream or a perennial stream and vice versa. Typical watersheds/drainages within the Utah coal fields contain numerous drainages characterized as ephemeral, intermittent and perennial. Requiring the Corps of Engineers to provide the delineation between the three drainage types would be unduly cumbersome and time-consuming. As required by existing rule, additional protections, monitoring etc. are required for intermittent and perennial streams. From a baseline data collection stand-point, the Operator would need to know, with some confidence, where these increased data collection/protection areas are. Requiring Operators to wait for the Corps of Engineers to produce these delineations between drainage types would add unreasonable time constraints and uncertainty to baseline data collection efforts.
779.24	**44594**	The section was edited to include more details on maps and specific information related to surface/ subsurface man made features that are within or pass through the permit area to include constructed drainage ways and irrigation ditches. This clarifies the responsibility of the Permittee to return such items to pre-mining condition beyond items like transmission lines. Six additional maps were added to the Environmental Resources section that will detail relevant information such as owners of surface waters, water supply intakes, public water supplies, and maps showing the location of any discharge points of mine water. These additional maps will expedite the Division's ability to determine impacts to water rights due to mining activities as well as assist in identifying well closure reasonable parties. A total of 28 maps may be required which will give the Division a clearer and more concise degree of pre-mining environmental information regarding the mining area.
780.15	**44599**	The proposed edit removes large portions of the Blasting regulations that would make it more difficult to document, verify, and monitor blasting programs. There are no regulations for blaster certification to standardize, no detail of when preblasting surveys will be conducted, and no detail of publishing the blast schedule. The Utah DOGM strongly recommends the rule be revised to more closely follow the existing blasting rules.
		HYDROLOGY
780.19(b)(6)(B)(iv) & 784.19(b)(6)(C)(iv)	**44601** **44622**	Ground-water quantity sampling: "Baseline data collection must continue until the dataset includes 12 consecutive months without severe drought or abnormally high precipitation". The Palmer Drought Severity Index (PDSI) was analyzed at four mine sites in Utah over the last 40 years from 1975 to 2014. The mines are located in regions containing the largest coal fields in Utah: Skyline mine, Bear Canyon mine, Coal Hollow mine, and the West Ridge mine. At these mine sites it is found baseline data could have been collected over twelve consecutive non-drought or abnormally high precipitation months (-3>PDSI>3) only 35 to 53 percent of the time. It appears the start time and duration of when the climate fell between -3>PDSI>3 is seemingly random. For instance, in the last 40 years the Coal Hollow mine had only one multi-year period of ~ 5 years when the climate fell within the -3>PDSI>3 climate range. Three of the four mines had 5-year spans where it was not possible to collect 12 consecutive months of baseline data when the climate ranged from -3>PDSI>3. In multiple instances a +12-month consecutive span was interrupted by only one month of drought causing the clock to reset.

		Aiguo Dai, the leading expert on the Palmer Drought Severity Index (PDSI), suggests the drought index models are predicting an increased risk of drought in the twenty-first century ("Increasing drought under global warming in observations and models", A. Dai, *Nature Climate Change*, 2012). With such uncertainty in future climate conditions, this baseline requirement may not only be prohibitive but impossible to achieve. The Utah DOGM strongly recommends the rule be revised to state, "Baseline data collection must continue until the dataset includes 12 consecutive months without severe drought or abnormally high precipitation; or 48 consecutive months and a supporting detailed analysis of past, present, and future predictions of climate conditions and climate indices, whichever occurs first".
780.19(c)(4)(B)(iv) & 784.19(c)(4)(C)(iv)	**44601** **44622**	Surface-water quantity sampling: "Baseline data collection must continue until the dataset includes 12 consecutive months without severe drought or abnormally high precipitation". The Palmer Drought Severity Index (PDSI) was analyzed at four mine sites in Utah over the last 40 years from 1975 to 2014. The mines are located in regions containing the largest coal fields in Utah: Skyline mine, Bear Canyon mine, Coal Hollow mine, and the West Ridge mine. At these mine sites it is found baseline data could have been collected over twelve consecutive non-drought or abnormally high precipitation months (-3>PDSI>3) only 35 to 53 percent of the time. It appears the start time and duration of when the climate fell between -3>PDSI>3 is seemingly random. For instance, in the last 40 years the Coal Hollow mine had only one multi-year period of ~ 5 years when the climate fell within the -3>PDSI>3 climate range. Three of the four mines had 5-year spans where it was not possible to collect 12 consecutive months of baseline data when the climate ranged from -3>PDSI>3. In multiple instances a +12-month consecutive span was interrupted by only one month of drought causing the clock to reset. As stated for ground water, Aiguo Dai, the leading expert on the Palmer Drought Severity Index (PDSI), suggests the drought index models are predicting an increased risk of drought in the twenty-first century ("Increasing drought under global warming in observations and models", A. Dai, *Nature Climate Change*, 2012). With such uncertainty in future climate conditions, this baseline requirement may not only be prohibitive but impossible to achieve. The Utah DOGM strongly recommends the rule be revised to state, "Baseline data collection must continue until the dataset includes 12 consecutive months without severe drought or abnormally high precipitation; or 48 consecutive months and a supporting detailed analysis of past, present, and future predictions of climate conditions and climate indices, whichever occurs first".
780.19 Ground and Surface Water 12-consecutive month requirement	**44601**	The proposed rule revision requires a "minimum of 12 consecutive months" of baseline data collection. Such a requirement will be difficult, and in some cases impossible, to require for permittees in the State of Utah. It is routine for hydrologic resources identified for baseline data collection to be located in extremely remote areas, at high elevations. Access to such sites during the winter months is extremely difficult and in many instances, life threatening. The rule should have some clarification that allows the Regulatory Authority (RA) to determine a reasonable baseline data collection frequency that does not potentially endanger the sampler's life. Additionally, in the instance of surface water monitoring sites during the winter months, these sites are routinely buried by snow and ice. Snow packs in the upper elevations of the coal fields of Utah can be significant (10' or more). If a sampler were to access the site, it would require extensive excavation to access the surface and/or ground water monitoring site. Typically, these resources located at high elevations are frozen during the winter months, particularly if they produce low flows.
784.30(a)(1)	**44633**	Clarify the statement, "a scale of 1:12,000, or larger". Clarify if larger means a scale of 1:24,000 or a scale of 1:2000.
773.15	**44589**	The proposed rule revision adds paragraph (e)(3) that requires that "the regulatory authority find that it has inserted into the permit criteria defining material damage to the hydrologic balance outside the permit area on a site-specific basis, expressed in numerical terms for each parameter or concern." It's intended to ensure that "permit-specific criteria" are established and readily available to the permittee, inspectors and permit reviews. Previous comments received by OSM indicated concern that a PAP could not be approved unless the RA finds that the operation has been designed to prevent material damage to the hydrologic balance outside the permit area and thus interpreting that section as requiring the prevention of acid mine drainage (AMD). OSM's response indicates

		that "conducting operations in a manner likely to result in AMD is acceptable only when AMD formation is expected to be a temporary phenomenon". Further clarification as to what OSM considers temporary would be of great use. Clarify what temporary means (2 years, 10 years, 20 years). Clarify what methods/procedures/requirements should an RA utilize to establish the duration of AMD that may be produced as a result of coal mining activity.
779.24	**44594**	The rule revision would require that a permittee provide mapping of "all public water supplies and wellhead protection zones located within one-half mile of the proposed permit area". Further clarification as to the extent of "water supplies" that must be mapped is needed. In the State of Utah, often times domestic water supplies for a given municipality/township are derived from multiple watersheds in the form of springs and streams. OSM should clarify what level of mapping would be required in these instances where the "water supplies" are produced from large-scale watershed areas.
780.19(e)(1)(iii)	**44602**	The proposed rule revision requires "A representative sample of ephemeral streams within both the proposed permit area and the adjacent area that would receive discharges from the proposed operation". Ephemeral drainages are ubiquitous in the State of Utah coal fields. Determining what a "representative sample" of these drainages has been problematic as many of them are considered "dry washes" in that they only flow during periods of precipitation and/or snow melt periods. As such, the discharges in these ephemeral drainages are extremely variable. Question have arisen in the past as to what constitutes a "representative sample" when the ephemeral drainages are effectively dry (i.e. no observable flow) the majority of a given water year. Additionally, the State of Utah has encountered issues associated with attempts to obtain samples of ephemeral drainages during a storm event. Often times, a new lease area can contain multiple ephemeral drainages located over a large geographic area. It can be extremely difficult (if not impossible) for a permittee to reach all the ephemeral drainages during a moderate rainfall event. Often times, the flows at these ephemeral drainages may last for a very short period of time. Additional information as to what constitutes a "representative sample" of an ephemeral stream is needed.
780.19(i)	**44603**	Under the "Coordination with Clean Water Act agencies" revisions on page 44603, the RA is directed to "consult with" and "make best efforts to minimize differences in baseline data collection points and parameters to the extent practicable and consistent with each agency's mission, statutory requirements and implementing regulations". Implementing this rule revision will be extremely problematic and time-consuming. In the State of Utah, the Coal Regulatory Program has worked with the Division of Water Quality (Utah State agency with primacy of the Clean Water Act) in producing the 403(d) listings required under the Clean Water Act. During these instances, it was abundantly clear that the data collection requirements identified in the Clean Water Act are very different than those heretofore required under SMCRA. It would be extremely time consuming and difficult to "minimize differences" in baseline data collection as the Clean Water Act requirements are far more robust/rigorous than those being proposed by this rule revision relative to required parameters, frequency etc.
780.19(j)	**44603**	The proposed rule under "Corroboration of baseline data" will require that the RA, or a third party, conduct a corroboration of the baseline information in an application. Additional information is needed; namely what level of data collection is necessary in order to corroborate the data provided by the Permittee. Clarify whether corroboration of the data means one sample of all the monitoring points in a particular season (i.e. high flow/snow melt period and or baseflow conditions). If the application is provided to the RA for review during inaccessible winter months, corroboration of the data may not be possible at high elevation monitoring sites. It would appear that this rule revision could produce lengthy and arbitrary delays in application reviews depending on when the application was submitted.
780.22(b)(1) and 780.22(b)(3)(i)	**44605**	The proposed rule revision requires a Permittee must demonstrate that alternative water sources are both available and feasible to develop if the prepared PHC determination indicates that the proposed mining operation may result in contamination, diminution or interruption of an underground or surface source of water within the proposed permit or adjacent area. The rule revision continues under paragraph (3)(1) stating, "When a suitable alternative water source is available, your operation plan must require that the alternative water supply be developed and installed on a permanent basis before your operation may adversely affect an existing water supply

		protected under 816.40 of this chapter". Typical PHC determinations in the State of Utah will discuss that "contamination, diminution or interruption" of hydrologic resources "may" occur. The requirement to identify an alternative/suitable water source seems reasonable. However; requiring the Permittee to develop and install a permanent water supply prior to mining in an area that "may" have issues or conversely may not, is excessive.
		GENERAL
General	**All**	In many cases "surface mining" is specified and "underground mining" is not. Clarification should be made on the intended application of the terms in the regulations. Many rules refer to the "Permit Area". This leads to confusion for some Utah permits since the "Permit Area" only consists of the disturbed area and does not include adjacent areas. The Utah DOGM strongly recommends the rule be revised to be clear and consistent with references to surface mining and underground mining and also the permit area and adjacent area. Additionally, as a general statement in reviewing the stream protection rule, many of the proposed revisions are stringently prescriptive and do not afford the RA any leeway in applying professional judgment based upon site-specific conditions. Many of the proposed revisions will be extremely difficult (if not impossible) in semi-arid/arid hydrologic regimes as encountered in the coal fields of Utah. For example, requiring 12 consecutive months of baseline data collection for hydrologic water monitoring points located in high elevations (10,000'+) during the winter months would be a precarious endeavor if not a life threatening exercise for the sampler tasked with obtaining the data. However; the proposed revisions to baseline data collection now allow reasonable interpretation by the RA in applying the proposed rule. As stated previously, there are numerous instances (such as the 12 consecutive months of data collection provision) where strict adherence/enforcement of the rule will not be practical and in some cases even feasible. The Utah DOGM strongly encourages OSMRE to reevaluate the proposed Stream Protection Rule with that in mind.
779.24. (28)(c) 780.13 15(c) Maps	**44595**	The requirement to submit material in digital format supports the States efforts in collecting Geographical Information System (GIS) data. Incorporation of the rule would support the regulatory authority in the effort to implement this requirement at the state level. The Utah DOGM supports and recommends the adoption of this rule.
780.28 (3) Additional requirements adjacent to streams	**44610**	This requirement fails to address situations wherein riparian areas and aquatic life do not exist although ephemeral drainages or streams do. Many drainages in Utah may be considered "ephemeral" but they do not contain riparian vegetation nor do they support aquatic life. Slot Canyons and desert swells are perfect examples. In these cases, determining biological condition is a futile effort. In general, the requirement to collect information on the biological condition of streams is misguided. The evaluation of these studies can take months or years. If the purpose of the rule is to provide a "timely detection" of adverse trends and "timely implementation" of any necessary corrective measures as noted in Section III of the Federal Register, water quality analysis provides a much faster solution. Studies of biological condition show the health of a stream over time and do not necessarily provide immediate results. The Utah DOGM strongly recommends the rule be revised to include exemptions when vegetation is not considered "riparian" or if the study is a futile effort.